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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/228,103	01/11/1999	HARSH GOPAL	15836-001001	7307
26231	7590	04/01/2004	EXAMINER	
FISH & RICHARDSON P.C. 5000 BANK ONE CENTER 1717 MAIN STREET DALLAS, TX 75201			HON, SOW FUN	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 04/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/228,103	GOPAL, HARSH
	Examiner	Art Unit
	Sow-Fun Hon	1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 28 January 2004.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 16-42 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 16-20 is/are allowed.  
 6) Claim(s) 21-42 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1)  Notice of References Cited (PTO-892)  
 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_.

4)  Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5)  Notice of Informal Patent Application (PTO-152)  
 6)  Other: \_\_\_\_\_.

**DETAILED ACTION**

***Status of Claims***

1. Claims 16-20 were previously allowed in Paper # 11 (mailed 11/20/01).

***Response to Amendment***

***Rejections Withdrawn***

2. The 35 U.S.C. 103(a) rejections of claims 21-42 have been withdrawn due to the new grounds of rejection below.

***New Rejections***

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 21-23, 25-29, 31, 34-36, 38-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu et al. (previously cited US 3,898,348).

Chiu et al. has an aqueous emulsion (solution or suspension) (column 5, lines 5-10) for coating the internal surface of a food casing (column 3, lines 15-25), comprising at least one polyglyceryl ester (ester of polyglycerol) (column 4, lines 35-40), the polyglyceryl ester comprising at least two glyceryl moieties (from the term "poly"). An example gives an amount of 1.5 % polyoxyethylene sorbitan ester of higher fatty acids (column 8, lines 45-50).

Polyglyceryl ester (ester of polyglycerol) is an equivalent of polyoxyethylene sorbitan ester of higher fatty acids (column 4, lines 35-40), and therefore can be present in the aqueous emulsion

in the amount of 1.5 wt %, which is within the claimed range of from about 1 to about 5 wt % (claims 25, 36).

An example of the amount of water is 50 (49.5) % (column 7, lines 25-30). Aqueous solutions comprise water as the major solvent. Thus the claimed amount of greater than 50 wt % (claim 21) and greater than 65 wt % (claim 31) are the result of routine experimentation with polyglyceryl ester aqueous emulsions in the absence of a showing of unexpected results.

Chiu et al. gives examples of coatings with 78 mg/m<sup>2</sup> (0.05 mg/in<sup>2</sup>) of polyglyceryl ester (fatty acid ester) (column 10, lines 45-50). Thus the claimed range of emulsion coating, which includes other ingredients, of from about 200 to 1200 mg per square meter, is within the realm of routine experimentation (claims 41-42).

Chiu et al. teaches an amount of between about 10 % and 90 % by weight of glycerine (glycerol) or propylene glycol (claims 23, 35) which are polyhydric alcohols (claims 22, 34) as defined by the specification (original claims 13-14). This range overlaps the claimed range of from about 10 to about 20 wt % (claims 22, 34).

Chiu et al. teaches at least about 0.05 wt % of water soluble cellulose derivative (ether) (column 5, lines 5-10) which overlaps the claimed range of up to about 2 wt % (claims 26, 37). The water soluble derivative can be methylcellulose or hydroxypropylcellulose (column 3, lines 1-5) (claims 27, 38).

Chiu et al. gives an example of 1.0 wt % silicon oil (silicone fluid) (composition F, column 16, lines 25-30). Silicon oil is taught to be suitable for admixture with the water soluble cellulose derivative (ether). Silicon oil is a water insoluble low viscosity oil as defined by the

specification (original claims 7-8). The amount of 1.0 % falls within the claimed range of up to about 5 wt % (claims 28-29, 39-40).

5. Claims 30, 33, 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu et al. as applied to claims 21-23, 25-29, 31, 34-36, 38-42 above, and further in view of Hammer et al. (previously cited US 5,370,914).

Chiu et al. has been discussed above, and teaches the aqueous emulsion for coating the internal surface of a food casing comprising, at least one polyglyceryl ester, the polyglyceryl ester comprising at least two glyceryl moieties. Chiu et al., however, fails to teach an additional emulsifier.

Hammer et al. teaches a coating for the inner surface of a food casing which improves peelability, (meaning that it is a release composition since it releases the food from the casing) (column 1, lines 5-10). The coating composition is taught to contain additives such as slip agents, stirring aids and release agents, silicon oil being one of them (column 3, lines 30-40). The additives are present in the aqueous coating composition more preferably in the amount 1 to 5 wt %, and comprise emulsifiers for emulsifying the additives (column 3, lines 45-55). Thus the amount of 1 to 5 wt % emulsifier overlaps the claimed range of from about 0.1 to about 2 wt % (claims 30, 33).

Therefore it would have been obvious to one of ordinary skill in the art to have added from 0.1 to 2 wt % emulsifier to emulsify the additives in the aqueous emulsion coating of Chiu et al.

6. Claims 24, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu et al. as applied to claims 21-23, 25-29, 31, 34-36, 38-42 above, and further in view of Colliopoulos et al. (previously cited US Patent 3,966,632).

Chiu et al. has been discussed above, and teaches the aqueous emulsion for coating the internal surface of a food casing comprising, at least one polyglyceryl ester, the polyglyceryl ester comprising at least two glyceryl moieties. Chiu et al., however, fails to teach that the polyglyceryl ester comprises triglyceryloleate.

Colliopoulos et al. teaches that a commercially available polyglyceryl ester made from soy bean oil contains a mixture of di-, tri- and tetra polyglyceryl esters (column 1, lines 15-20), which encompass the triglyceryloleates since the common name for glyceryl ester is glyceryloleate (column 1, lines 50-55).

Therefore it would have been obvious to one of ordinary skill in the art to have used a commercially available polyglyceryl ester containing triglyceryloleate as the polyglyceryl ester of Chiu et al. in order to provide an emulsion coating with readily available ingredients.

#### ***Response to Arguments***

7. Applicant's arguments with respect to claims 21-42 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number (571)272-1492. The examiner can normally be reached Monday to Friday from 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571)272-1498. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Sow-Fun Hon  
03/25/04

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

3/29/04